

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph that begins on page 1, line 5 and ends on page 1, line 24 with the following amended paragraph:

The present application is related to U.S. patent application Ser. No. 10/348,077, entitled "Method and System for Obtaining Logical Performance Data for a Circuit in a Data Network," filed on January 21, 2003, and U.S. patent application Ser. No. 10/348,592, entitled "Method and System for Provisioning and Maintaining a Circuit in a Data Network," filed on January 21, 2003. This application is also related to U.S. patent application Ser. No. 10/745,117, entitled "Method And System For Providing A Failover Circuit For Rerouting Logical Circuit Data In A Data Network," ~~bearing attorney docket number 60027.0337US01/BS030233~~, filed on December 23, 2003, U.S. patent application Ser. No. 10/745,047, entitled "Method And System For Automatically Renaming Logical Circuit Identifiers For Rerouted Logical Circuits In A Data Network," ~~bearing attorney docket number 60027.0339US01/030253~~ filed on December 23, 2003, U.S. patent application Ser. No. 10/745,170, entitled "Method And System For Automatically Identifying A Logical Circuit Failure In A Data Network," ~~bearing attorney docket number 60027.0340US01/030259~~, filed on December 23, 2003, and U.S. patent application Ser. No. 10/744,921, entitled "Method And System For Automatically Rerouting Logical Circuit Data In A Data Network," ~~bearing attorney docket number 60027.0341US01/030273~~, filed on December 23, 2003, All of the above-referenced applications are assigned to the same assignee as the present application and are expressly incorporated herein by reference.

Please replace the paragraph that begins on page 2, line 10 and ends on page 2, line 16 with the following amended paragraph:

In large-scale networks, the host and remote end devices of a network circuit may be connected across different local access and transport areas ("LATAs") which may [[be]] in turn be connected to one or more Inter-Exchange Carriers ("IEC") for transporting data between the LATAs. These connections are made through physical trunk circuits utilizing fixed logical connections known as Network-to-Network Interfaces ("NNIs"). For example, a network circuit from Birmingham to Miami may have connections from a host device in the Birmingham LATA to an IEC and then from the IEC to a remote device in the Miami LATA.

Please replace the paragraph that begins on page 2, line 12 and ends on page 2, line 17 with the following amended paragraph:

In large-scale networks, the host and remote end devices of a network circuit may be connected across different local access and transport areas ("LATAs") which may [[be]] in turn be connected to one or more Inter-Exchange Carriers ("IEC") for transporting data between the LATAs. These connections are made through physical trunk circuits utilizing fixed logical connections known as Network-to-Network Interfaces ("NNIs").

Please replace the paragraph that begins on page 2, line 18 and ends on page 3, line 5 with the following amended paragraph:

Periodically, failures may occur to the trunk circuits or the NNIs of network circuits in large-scale networks causing lost data. Currently, such network circuit failures are handled by dispatching technicians on each end of the network circuit (i.e., in each LATA) in response to a

reported failure. The technicians manually access a logical element module to troubleshoot the logical circuit portion of the network circuit. The logical element module communicates with the switches in the data network and provides the technician with the status of the logical connections which make up the logical circuit. Once the technician determines the status of a logical connection at one end of a logical circuit (e.g., the host end), the technician then must access a network database to determine the location of the other end of the logical circuit so that its status may also be ascertained. If the technician determines the logical circuit is operating properly, the technician then accesses a physical element module to troubleshoot the physical circuit portion of the network circuit to determine the cause of the failure and then repair it. If, while troubleshooting a network circuit, the technician determines that a network circuit will be "down" (i.e., losing data) for an extended time period ~~while troubleshooting a network circuit~~, the technician may manually reroute the data from a failed network circuit to an available unused or "backup" network circuit while the failed network circuit is being repaired.

Please replace the paragraph that begins on page 13, line 11 and ends on page 13, line 26 with the following amended paragraph:

The network management system 175 also includes the logical element module 153 which is in communication with the switches in the data network 2 through management trunks 183. The logical element module 153 runs a network management application program to monitor the operation of logical circuits which includes receiving trap data generated by the switches which ~~[[with]]~~ indicate the status of logical connections. The trap data may be stored in the logical element module 153 for later analysis and review. The logical element module 153 is also in communication with the network database 170 via management trunks 172 for accessing

information stored in the network database 170 regarding logical circuits, such as the logical circuit identifier data. The logical circuit identifier data may include, for example, the DLCI or VPI/VCI header information for each data frame or cell in the logical circuit including the circuit's destination and service parameters. The logical element module 153 may consist of terminals (not shown) that display a map-based graphical user interface ("GUI") of the logical connections in the data network. An illustrative logical element module is the NAVISCORE™ system marketed by LUCENT TECHNOLOGIES, Inc. of Murray Hill, NJ.

Please replace the paragraph that begins on page 16, line 21 and ends on page 17, line 10 with the following amended paragraph:

FIG. 5 is a flowchart describing logical operations 500 performed by the network management system 175 for automatically tracking the rerouting of logical circuit data in a data network, according to an embodiment of the invention. It will be appreciated that the logical operations 500 may be initiated when data is rerouted from a logical circuit to a logical failover circuit (e.g., a logical failover circuit in the failover network 17) by the network management module 176. It will be appreciated that the network management module 176 may be configured and utilized to automatically detect logical circuit failures and reroute logical circuit data from the failed logical circuits in a data network. An illustrative method detailing the automatic monitoring of logical circuits to identify a logical circuit failure in a data network is presented in co-pending U.S. patent application Ser. No. 10/745,170, entitled "Method And System For Automatically Identifying A Logical Circuit Failure In A Data Network," bearing attorney docket number 60027-0340US01/030259, filed on December 23, 2003, and assigned to the same assignee as this application, which is expressly incorporated herein by reference. An

illustrative method detailing the rerouting of logical circuit data to a logical failover circuit is presented in co-pending U.S. patent application Ser. No. 10/744,921, entitled "Method And System For Automatically Rerouting Logical Circuit Data In A Data Network," bearing attorney docket number 60027.0341US01/030273, filed on December 23, 2003, and assigned to the same assignee as this application, which is expressly incorporated herein by reference.

Please replace the paragraph that begins on page 18, line 4 and ends on page 18, line 15 with the following amended paragraph:

As discussed briefly above, the network management module 176 may be configured to automatically reroute logical circuit data from a failed logical circuit to a logical failover circuit in the data network 2. During the reroute of logical circuit data, the network management module 176 may also be configured to rename the logical circuit identifier assigned to a failed logical circuit to the logical circuit identifier assigned to a corresponding logical failover circuit until the failed logical circuit has been restored. An illustrative method detailing ~~the renaming~~ the renaming of logical circuit identifiers is presented in co-pending U.S. patent application Ser. No. 10/745,047, entitled "Method And System For Automatically Renaming Logical Circuit Identifiers For Rerouted Logical Circuits In A Data Network," bearing attorney docket number 60027.0339US01/030253 filed on December 23, 2003, and assigned to the same assignee as this application, which is expressly incorporated herein by reference.

Please replace the paragraph that begins on page 18, line 16 and ends on page 18, line 24 with the following amended paragraph:

The logical operations 500 continue from operation 505 to operation 510 where the network management module 176 generates a table for presenting the current reroute statistics generated at operation 505. It will be appreciated that the table may be presented in an electronic format so that it is graphically displayed on one or more display terminals of the network management module 176. FIG. 6A is a table presenting current reroute statistics which may be generated for rerouted logical circuits in the data network 2, according to an embodiment of the invention. The table will be discussed in greater detail in the description of FIG. 6A below.

Please replace the paragraph that begins on page 19, line 7 and ends on page 19, line 13 with the following amended paragraph:

At operation 525, the network management module 176 generates updated reroute statistics based on the received updated trap data and then updates the table (generated at operation 510) at operation 530. FIG. 6B [[7]] is a table presenting updated reroute statistics which may be generated for rerouted logical circuits in the data network 2, according to an embodiment of the invention. The table will be discussed in greater detail in the description of FIG. 6B [[7]] below. The logical operations 500 then continue at operation 535.